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Five-Year Review Report

Second Five-Year Review Report
For
Monticello Radioactively Contaminated Properties
Monticello, Utah
San Juan County, Utah

June 2002

Prepared by
U.S. Department of Energy
Grand Junction Office
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Approved by: Date:

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List of Acronyms

AEC	U.S. Atomic Energy Commission
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cm	centimeter(s)
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ESD	Explanation of Significant Differences
FFA	Federal Facility Agreement
GJO	Grand Junction Office
IRIS	Integrated Risk Information System
LTSM	Long-Term Surveillance and Maintenance
MMTS	Monticello Mill Tailings Site
MRAP	Monticello Remedial Action Project
MVP	Monticello Vicinity Properties
NPL	National Priorities List
O&M	operation and maintenance
OU	operable unit
pCi/g	picocurie(s) per gram
RAO	remedial action objective
RfD	reference dose
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act of 1986
SFMP	Surplus Facilities Management Program
UDEQ	Utah Department of Environmental Quality
UDOT	Utah Department of Transportation
VCA	Vanadium Corporation of America

Executive Summary

The Monticello Radioactively Contaminated Properties site, also known as the Monticello Vicinity Properties (MVP) site, has been remediated by the U.S. Department of Energy (DOE) Grand Junction Office (GJO) in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986. The MVP site includes public and private properties contaminated with uranium mill tailings originating from the Monticello Mill Tailings Site (MMTS) near Monticello, Utah

The remedy for the MVP included removal of radioactively contaminated soils, uranium mill tailings, and processing materials to an interim repository located at the MMTS. Because mill tailings from the Monticello millsite were used for construction purposes, clean up activities included demolition of sidewalks, patios, sheds, and other improvements. Affected properties were backfilled, graded, and reconstructed. The contaminated materials were later placed in the on-site repository as part of the MMTS remedy. The remedy also included leaving some radioactively contaminated soils in place and applying supplemental standards and institutional controls to ensure that the remedy remains protective of human health and the environment.

This CERCLA five-year review is required by statute. Section 121 (c) of CERCLA requires that remedial actions resulting in any hazardous substances, pollutants, or contaminants remaining at a site above levels that allow for unlimited use and unrestricted exposure be reviewed every five years to ensure protection of human health and the environment.

This is the second five-year review conducted for the MVP. Since the last five-year review, remedial activities at all operable units (OUs) have been completed and the site has been removed from the National Priorities List (NPL). The remedy for these OUs have been constructed in accordance with the *MVP Project Declaration for the Record of Decision* (ROD) *and Record of Decision Summary*.

The remedy for completed remedial actions at OU A through OU G are protective of the environment in the short and long-term. The remedy for completed remedial activities for OU H is protective in the short-term; however, a pending zoning change for property MS–00176–VL needs to be completed for the remedy to be protective of human health and the environment in the long-term. One of the following actions needs to be taken to ensure protectiveness: property MS–00176–VL must be re-zoned to disallow building construction in areas where contamination has been left in place; or a restrictive easement must be placed on the property deed that will disallow building construction in these areas.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site name (from WasteLAN)**:** Monticello Radioactively Contaminated Properties		
EPA ID (from WasteLAN)**:** UTD980667208		
Region: 8	**State:** Utah	**City/County:** Monticello/San Juan

SITE STATUS	
NPL status: ☐ Final ☒ Deleted ☐ Other (specify) _____	
Remediation status (choose all that apply): ☐ Under Construction ☐ Operating ☒ Complete	
Multiple OUs?* ☒ YES ☐ NO	**Construction completion date:** 12/30/1998
Has site been put into reuse? ☒ YES ☐ NO	

REVIEW STATUS	
Lead agency: ☐ EPA ☐ State ☐ Tribe ☒ Other Federal Agency U. S. Department of Energy	
Author name: Art Kleinrath	
Author title: LTSM Program Manager	**Author affiliation:** U.S. Department of Energy
Review period:** 6/13/1997 to 5/20/2002	
Date(s) of site inspection: 9/19 /2001 & 9/20/2001	
Type of review: ☒ Post-SARA ☐ Pre-SARA ☐ NPL-Removal only ☐ Non-NPL Remedial Action Site ☐ NPL State/Tribe lead ☐ Regional Discretion	
Review number: ☐ 1(first) ☒ 2 (second) ☐ 3 (third) ☐ Other (specify) _____	
Triggering action: ☐ Actual RA Onsite Construction at OU # _____ ☐ Actual RA Start at OU # _____ ☐ Construction Completion ☒ Previous Five-Year Review Report ☐ Other (specify) _____	
Triggering action date (from WasteLAN)**:** 2/13/1997	
Due date (five years after triggering action date)**:** 2/13/2002	

* ["OU" refers to operable Unit.]
** [Review period should correspond to the actual start and end dates of the Five-Year Review in WasteLAN.]

Five-Year Review Summary Form, cont'd
Issues:

Privately owned supplemental standards property has not been rezoned.

Erosion is occurring near supplemental standards areas along the Highway 191 embankment.

Recommendations and Follow-up Actions:

The privately owned supplemental standards property should be rezoned or a restrictive easement should be obtained to create enforceable institutional controls.

Continue monitoring supplemental standards properties for erosion and implement contingency actions identified in Long-Term Surveillance and Maintenance (LTSM) operating procedures if the erosion threatens the contamination left in place.

Protectiveness Statements:
The remedy at OU A is protective of human health and the environment. Contamination has been removed from OU A and the exposure pathways have been eliminated.

The remedy at OU B is protective of human health and the environment. Contamination has been removed from OU B and the exposure pathways have been eliminated.

The remedy at OU C is protective of human health and the environment. Contamination has been removed from OU C and the exposure pathways have been eliminated.

The remedy at OU D is protective of human health and the environment. Contamination has been removed from OU D and the exposure pathways have been eliminated.

The remedy at OU E is protective of human health and the environment. Contamination has been removed from OU E and the exposure pathways have been eliminated.

The remedy at OU F is protective of human health and the environment. Contamination has been removed from OU F and the exposure pathways have been eliminated.

The remedy at OU G is protective of human health and the environment. Contamination has been removed from OU G and the exposure pathways have been eliminated.

The remedy at OU H (supplemental standards properties including Monticello city streets and utilities, Highways 191 and 666 rights-of-way, and MS–00176–VL) currently protects human health and the environment because supplemental standards have been applied and the property owners have verbally agreed to not build structures in or remove soils from areas in which contamination has been left in place. However, in order for the remedy to be protective in the long-term, one of the following actions need to be taken to ensure long-term protectiveness: institutional controls must be formalized for property MS–00176–VL by re-zoning to prohibit construction of habitable structures and removal of soil from areas where contamination has been left in place; or formalize institutional controls by placing a restrictive easement on the property deed that will prohibit construction of habitable structures and removal of soils from these areas.

Five-Year Review Summary Form, cont'd

Long-term Protectiveness:

The remedy for completed remedial actions at OU A through OU G are protective of human health and the environment in the short-term and long-term. The remedy for completed remedial activities for OU H is protective of human health and the environment in the short-term; however a pending zoning change for property MS–00176–VL needs to be completed for the remedy to be protective of human health and the environment in the long-term. The remedial action at OU H is protective only in the short-term because supplemental standards have been applied and the MS–00176–VL property owners have verbally agreed to not build structures in or remove soils from areas in which contamination has been left in place. One of the following actions need to be taken to ensure long-term protectiveness: property MS–00176–VL needs to be re-zoned to prohibit construction of habitable structures and removal of soils in areas where contamination has been left in place; or a restrictive easement must be placed on the property deed that will prohibit construction of habitable structures and removal of soils in these areas.

Other Comments:

The Monticello Radioactively Contaminated Properties site is also known as the Monticello Vicinity Properties site.

For all chemical constituents except uranium, exposure assumptions, toxicity data, and cleanup levels have not changed since the ROD was signed. However, recent toxicological studies suggest that a lower, more conservative reference dose (RfD) for uranium ingestion is justified (*Federal Register*, December 7, 2000). Based on these studies, EPA calculates that a RfD of 0.6 µg/kg/day is appropriate—a value 1/5 of that currently provided in EPA's *Integrated Risk Information System* (IRIS). Based on the current uranium RfD in IRIS, EPA Region III has calculated a soil screening level for residential use of 230 mg/Kg to be protective. If the RfD of 0.6 mg/kg/day is more appropriate, then a soil screening level of 46 mg/Kg would be considered protective for residential use. All of the soils at the site have been remediated to well below this level and would be protective even if, in the future, the lower RfD for uranium is formally adopted and revised in IRIS.

Monticello Radioactively Contaminated Properties
Monticello, Utah
Second Five-Year Review Report

I. Introduction

The purpose of the five-year review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in five-year review reports. In addition, five-year review reports identify issues found during the review, if any, and identify recommendations to address them.

The five-year review is a statutory requirement for the Monticello Radioactively Contaminated Properties otherwise known as the Monticello Vicinity Properties (MVP). CERCLA Section 121 (c) states the following:

> *If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such review, and any actions taken as a result of such reviews.*
>
> The U.S. Environmental Protection Agency (EPA) interpreted this requirement further in the National Contingency Plan [40 Code of Federal Regulations (CFR) 300.430(f)(4)(ii)] which states:
>
> *If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

DOE conducted the five-year review of the remedy implemented at the MVP in San Juan County in and near the City of Monticello, Utah. Contractor personnel assisted DOE with the review and EPA and the Utah Department of Environmental Quality (UDEQ) provided oversight. The Long-Term Surveillance and Maintenance (LTSM) Project Manager conducted this review for the entire site from September 2001 through May 2002. This report documents the results of the review.

This is the second five-year review for the MVP site. The triggering action for this statutory review is the date of the first five-year review report (February 13, 1997). This five-year review is required by statute because contamination remains at the site above levels that allow for unlimited use and unrestricted exposure.

II. Site Chronology

Table 1 – Chronology of Site Events

Event	Date
Vanadium and uranium milling processes were conducted at the MMTS resulting in soil contamination of properties in the vicinity of the millsite.	1941 – 1960
Millsite was accepted into the Surplus Facilities Management Program to ensure safe caretaking and decommissioning of government facilities that had been retired from service but still contained radioactive contamination. Monticello Remedial Action Project (MRAP) was established.	1980
Removal actions were initiated for two properties in 1983 and completed in 1984.	1983
Remedial activities for vicinity properties were separated from MRAP. MVP was established.	1983
DOE began cleanup of MVP prior to signing the ROD.	1984
The MVP was placed on the NPL.	June 10, 1986
The MMTS was placed on the NPL.	November 16, 1989
MVP Record of Decision signed.	November 29, 1989
Federal Facility Agreement Signed	February 1990
Millsite Pre-Excavation Final Design Report established an alternate Interim Repository that would be used to store wastes removed from MVP. No Explanation of Significant Differences (ESD) required for this action.	1993
An ESD was prepared to explain the increase of cost of the project based on the increase of included properties.	April 1995
OU A construction completed and documented in the Draft Final Remedial Action Report.	November 8, 1996
First CERCLA 5-Year Review Report	February 13, 1997
OU C construction completed and documented in the Draft Final Remedial Action Report.	October 15, 1997
OU F construction completed and documented in the Draft Final Remedial Action Report.	December 24, 1997
OU D construction completed and documented in the Draft Final Remedial Action Report.	March 18, 1998
OU E construction completed and documented in the Draft Final Remedial Action Report.	March 18, 1998
ESD issued to provide the rationale for applying supplemental standards to MVP and MMTS properties in which contamination was left in place.	February 1999
OU H construction completed and documented in the Draft Final Remedial Action Report.	April 29, 1999
OU B construction completed and documented in the Draft Final Remedial Action Report.	July 14, 1999
OU G construction completed and documented in the Draft Final Remedial Action Report.	July 14, 1999
Deletion of entire site from NPL.	February 28, 2000
MVP and MMTS transferred to LTSM Program.	October 1, 2001

III. Background

Physical Characteristics

The MMTS and MVP Site are located in San Juan County, in and near the City of Monticello in southeastern Utah (see Attachment 1). The City of Monticello lies in the Paradox Basin just east of the Abajo Mountains and north of Montezuma Creek. The major highway in the Monticello area is U.S. Highway 191, which runs generally in a north-south direction, connecting Monticello with Moab 56 miles to the north and with Blanding 22 miles to the south. The City of Monticello is located at an average elevation of 7,000 feet above sea level.

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Land and Resource Use

Prior to 1941, the MMTS was undeveloped and used for grazing. The original Monticello mill was constructed in 1941 with government funding by the Vanadium Corporation of America (VCA). Vanadium milling operations ceased in 1955. Uranium milling continued until 1960, at which time, all milling operations ceased at the site.

Land use within the majority of MVP is for residential housing. Adjacent land usage includes heavy and light commercial use and a zoning district allowing a mix of agricultural, residential, industrial, and commercial use. Natural resource use in the immediate area includes domestic water supply systems with the City of Monticello being supplied by springs near the Abajo Mountains. Local groundwater usage includes rural drinking water and farmland irrigation. Surface water usage is primarily for irrigation. No mineral exploration exists within the MVP.

History of Contamination

The original Monticello mill was constructed in 1941 with government funding by the VCA to provide vanadium during World War II. VCA operated the mill until early 1944 and again from 1945 through 1946 producing vanadium as well as a uranium-vanadium sludge. In 1948, the U.S. Atomic Energy Commission (AEC) purchased the site. Uranium and vanadium milling operations began again in 1949 under the auspices of AEC. Vanadium milling operations ceased in 1955, but uranium milling continued until 1960 when the mill was permanently closed.

Throughout the operating period, mill tailings from the Monticello millsite were used in the City of Monticello for construction. These tailings were used as fill for open lands; backfill around water, sewer, and electrical lines; sub-base for driveways, sidewalks, and concrete slabs; backfill against basement foundations; and as sand mix in concrete, plaster, and mortar. The total tonnage of uranium mill tailings removed from the millsite for construction purposes, although never documented, is believed to be approximately 135,000 tons. Removal of contaminated tailings from the Monticello millsite was restricted by August 1975 when a fence was erected around the site to prevent unauthorized access.

Initial Response

Radiological surveys were conducted throughout the City of Monticello to identify the existence, nature, and magnitude of radiation exposure from mill tailings originating from the Monticello millsite. Initial surveys were conducted in 1971 and again in 1980 to identify anomalous properties in the vicinity of the former millsite. These surveys identified 98 anomalous properties. In 1982, a total of 114 properties (including the 98 anomalous properties plus an additional 16 properties which were surveyed at the request of the landowners) were investigated. In 1983, 36 more properties were added to the investigation. In 1984, 10 additional buildings were identified for further investigations. The MVP site eventually included a total of 424 vicinity properties.

DOE, under the authority of the Atomic Energy Act, initiated the Surplus Facilities Management Program (SFMP) in 1978 to ensure safe caretaking and decommissioning of

government facilities that had been retired from service but still contained radioactive contamination. In 1980, the millsite was accepted into the SFMP and MRAP was established.

In 1983, remedial activities for vicinity properties were separated from MRAP with the establishment of the MVP Project. The first two removal actions were initiated in 1983 and completed in 1984. The MVP Site was listed on the NPL on June 10, 1986, and was remediated pursuant to a ROD dated November 29, 1989. The selected remedy for cleanup of the MVP site was excavation of tailings, ore, and related by-product material from vicinity properties; temporary storage on the millsite; and final disposal in the same repository described for OU I of the MMTS. Remediation of the MVP site was completed in 1999 and deletion from the NPL became effective February 28, 2000. The MMTS site is mentioned in this five-year review of the MVP because of its close relationship to the MVP.

Basis for Taking Action

Contamination at the MVP resulted from the storage and milling of vanadium and uranium ores from 1940 to 1961. While most of the contamination remained on the millsite, wind and water erosion spread some contaminants across parts of Monticello and other nearby rural areas. Private parties also removed tailings, ore, and contaminated material from the millsite for use as backfill, building materials, or other purposes.

The primary ore- and tailings-borne contaminants are radionuclides in the uranium decay series, particularly thorium-230, radium-226, radon-222, and daughters of radon-222. Significant exposure pathways affecting human health include:

- Inhalation of radon-222 and its daughters, which emit alpha radiation;
- External whole-body exposure to radionuclides that emit gamma radiation; and
- Inhalation and ingestion of dust containing thorium-230 and radium-226, which emit alpha and gamma radiation.

For radionuclides in byproduct material (as defined in the Atomic Energy Act), the cleanup standards for uranium mill tailings in Title 40 CFR Part 192 are considered relevant and appropriate. These standards require that average radium-226 concentrations in soil not exceed the background level by more than 5 picocuries per gram (pCi/g) in the surficial 15 centimeters (cm), or by more than 15 pCi/g in successively deeper 15 cm layers, averaged over 100 square meters. If these cleanup standards are met, the property concerned can be released for unlimited use and unrestricted exposure.

The relevant and appropriate standard for an occupied or habitable building requires that average concentrations of radon decay-products concentrations not exceed 0.02 working level to the extent practicable and in no case exceed 0.03 working level, and that gamma radiation not exceed background by more than 20 micro roentgen per hour. A habitable building can be released for unlimited use and unrestricted exposure if these standards are achieved.

IV. Remedial Actions

Remedy Selection

In 1988, the EPA, UDEQ, and DOE entered into a Federal Facility Agreement (FFA) that defines the roles and responsibilities of the parties for response action at the MVP and MMTS. DOE is the lead agency and performs response actions pursuant to Section 120 of CERCLA/SARA. EPA and UDEQ provide oversight of the response actions as described in the FFA.

The MVP ROD, which was signed November 2, 1989, requires removal of radioactive tailings and other contaminated material to the maximum extent practicable. Because mill tailings from the Monticello millsite were used locally for construction of residential buildings, the clean-up activities for the MVP required excavation of contaminated materials and, in some cases, demolition of sidewalks, patios, sheds, and other improvements. All excavations, affected structures, and other improvements were reconstructed to as close to their pre-remedial action condition as possible. The ROD specified that all contaminated material would be removed to the Monticello millsite and temporarily stored on the East Tailings Pile. Subsequently under MMTS, DOE determined, with the concurrence of EPA and UDEQ, that the contaminated materials would be placed in an interim repository located on the millsite. Temporarily storing the material in a different location on the millsite was insignificant and did not require an ESD.

The remedial action objectives (RAO) of all MVP OUs was to remove contamination from the properties, place the material in the interim repository for eventual disposal under MMTS, and reconstruct the property. The remedy reduced radiation exposure to the public by removing contaminated material or by implementing supplemental standards for areas in which contamination was left in place. Under 40 CFR 192.21 and 192.22, supplemental standards can be applied and some or all of the contamination can be left in place where removal would:

- pose a clear and present risk of injury to workers or to members of the public,
- directly produce health and environmental harm that is clearly excessive compared to the health and environmental benefits, or
- have an unreasonably high cost relative to the long-term benefits.

For those properties where contamination was left in place, institutional controls were implemented to restrict access and control the use of the land to prevent future exposure.

Two ESD's were issued for the MVP. An ESD was issued April 1995 explaining that the increase in cost of the project was a result of an increase in the number of contaminated properties that would be remediated. Another ESD was issued in February 1999 clarifying the application of supplemental standards to OU H.

Remedy Implementation

The MVP site was addressed in eight OUs containing a total of 424 properties. Contaminated material was removed to radium-226 in soil or interior cleanup standards established in 40 CFR 192.12, or to supplemental standards. Contaminated material was temporarily stored at the interim repository and eventually placed in the Monticello Repository under MMTS.

The first remedial design (OU A) was completed on September 6, 1994, remedial action was completed on May 15, 1996, and the Draft-Final Remedial Action Report was completed on November 8, 1996. The last remedial design (OU H) was completed on October 31, 1998, remedial action was completed on December 30, 1998, and the Draft-Final Remedial Action Report for OUs B and G was completed on July 14, 1999.

Each OU is defined below.

- **Operable Unit A—Properties Included in the FFA**. OU A consists of 104 properties.

- **Operable Unit B—Properties Included Subsequent to the FFA**. OU B consists of 243 properties, which were included between January 1990 and March 1995.

- **Operable Unit C—Disputed Properties.** OU C consists of 34 properties that initially had tailings contamination alleged to be from the Dry Valley Milling operation. DOE disputed its responsibility to remediate these properties because the contamination originated at an abandoned privately owned uranium mill; however, DOE subsequently agreed to remediate these properties.

- **Operable Unit D—Properties Contaminated with Potential Hazardous Substances.** These properties were initially included in OUs A, B, or C. During site assessments for radiological contamination or during remedial action activities, the presence of nonradiological hazardous substances at concentrations that could present an unacceptable risk to human health and the environment was identified. Nonradiological hazardous substances that exceeded risk-based cleanup standards were remediated on all but one property where ongoing operations limited the extent of cleanup. Six properties are included in this OU.

- **Operable Unit E—Properties Crossed by Halls' Ditch.** There are 11 properties in OU E that were crossed by an irrigation ditch called Halls' Ditch. The ditch, which crossed the millsite, was contaminated with tailings. The ditch was remediated but not reconstructed as agreed to by the owner.

- **Operable Unit F.** OU F consists of 10 properties previously included in OUs A, B, or C, where owner negotiations or owner refusal to allow access delayed remediation. DOE ultimately negotiated access and completed remedial action.

- **Operable Unit G.** OU G consists of 11 properties included in the MVP Site since the beginning of 1995. Five of these properties were included as a result of the Site Boundary Program.

- **Operable Unit H—Supplemental Standards**. OU H contains five properties where supplemental standards have been applied. One is a privately owned parcel with piñon/juniper woodlands. Four properties associated with U.S. Highway 191 embankment are owned by the Utah Department of Transportation (UDOT). Supplemental standards have also been applied to streets and utilities in the City of Monticello rights-of-way. These areas

have not been included as properties but are located within the City of Monticello; therefore, they are considered part of the MVP Site.

System Operations/Operation and Maintenance (O&M)

The Monticello Project was transferred to the LTSM Program at the DOE–GJO on October 1, 2001. This program provides stewardship to DOE sites that contain low-level radioactive materials and have no ongoing mission. The LTSM Program is tasked with ensuring compliance with applicable regulations, licenses, and agreements, and ensuring disposal sites remain protective of human health and the environment. LTSM activities are implemented through the LTSM Program in accordance with the *Monticello Long-Term Surveillance and Maintenance Administrative Manual*.

LTSM contractor employees staff the Monticello site on a full time basis to conduct activities identified in the *Monticello Long-Term Surveillance and Maintenance Administrative Manual.* The major components of the LTSM activities as they pertain to MVP include the following:

- Receiving and responding to public inquiries.
- Providing oversight to supplemental standards properties including surveillance for erosion or disturbance of soils and checking for unauthorized construction.
- Providing oversight of construction work performed in supplemental standards area by UDOT and the City of Monticello, surveying spoils for contamination, and furnishing temporary storage for contaminated material until it can be transported to the Grand Junction Disposal Cell.
- Conducting radiological surveys to support construction of habitable structures on supplemental standards properties.
- Monitoring institutional controls established to maintain protectiveness of the repository and supplemental standards properties.

V. Progress Since the Last Five-Year Review

The first five-year review of the MVP was conducted in 1997. Since that time, OU B through OU H have been completed and the site has been delisted. Deletion from the NPL became effective February 28, 2000.

On October 1, 2001, the MVP was transferred to the LTSM Program administered by DOE–GJO. LTSM activities have commenced.

O&M costs include property inspections and radiological monitoring of supplemental standards areas. Two full time contractor employees are assigned to the Monticello site to conduct LTSM activities for both the MVP and MMTS.

The projected LTSM budget for fiscal year 2002 (October 1, 2001 through September 30, 2002) is $370,000. This figure includes the LTSM budget for the related MMTS.

VI. Five-Year Review Process

Administrative Components

The activities scheduled for conducting this five-year review included community notification, site inspection, interviews with stakeholders and local government officials, and development of the five-year review report including review by EPA and UDEQ.

The LTSM Program initiated the five-year review by conducting a physical inspection of the site on September 19 and 20, 2001. The physical inspection was combined with the first annual site inspection of the MMTS required by the LTSM Program. Representatives from DOE, EPA, UDEQ, and the DOE contractor participated in the inspection. Results and details of the inspection are detailed in the *2001 Annual Inspection of the Monticello Mill Tailings (USDOE) and Monticello Radioactively Contaminated Properties Sites* report prepared by DOE in April 2002.

Community Involvement

Announcements were published on April 17, 2002 in two local newspapers, the *San Juan Record* and the *Blue Mountain Panorama*, describing the CERCLA five-year review process and providing the public with information on how to contact DOE and local LTSM Representatives. Copies of the announcements are provided in Attachment 2. Announcements were published in these two newspapers on May 1, 2002, informing the public that the draft five-year review reports were available and that the official comment period began on May 1, 2002, and ended on May 31, 2002. Copies of these announcements are also provided in Attachment 2. No public comments were received by DOE during the public comment period.

The Monticello City Manager, Mayor, Chief of Police, and Fire Chief were requested to be interviewed concerning the MMTS and MVP. The San Juan County Administrator, County Commission Chairman, County Road Supervisor, and an environmental engineer from UDOT were also solicited for interviews.

A public notification of the availability of this report [the S*econd Five-Year Review Report for Monticello Mill Tailings (USDOE*)] will be published in two local newspapers.

Document Review

This five-year review included a review of relevant documents including the LTSM records.

Documents reviewed include the following:

- *Monticello Vicinity Properties Project Declaration for the Record of Decision and Record of Decision Summary*

- U.S. Environmental Protection Agency Region VIII Hazardous Waste Management Division Five-Year Review (Type Ia), Monticello Vicinity Properties Site (San Juan County, Utah)

- *Monticello Long-Term Surveillance and Maintenance Administrative Manual*

- Record Field Books for the Monticello Long-Term Surveillance and Maintenance Program:

  City Streets and Utilities Record Book
  Highways 191 and 666 Record Book
  MS–00176–VL Record Book
  Temporary Storage Facility Record Book

Data Review

Results of inspections and radiological scanning of the City Streets and Utilities and Highways 191 and 666 supplemental standards areas were reviewed. These data are located in the field record books and on radiological survey maps.

Site Inspection

A site inspection was conducted on September 19 and 20, 2001. Representatives from DOE, EPA, UDEQ, and DOE contractor were present. DOE, EPA, and UDEQ agreed that the physical inspection of the site would serve as both the CERCLA five-year review site inspection and the annual inspection required under the LTSM Program. Results of the annual inspection are detailed in the *2001 Annual Inspection of the Monticello Mill Tailings (USDOE) and Monticello Radioactively Contaminated Properties Sites* report prepared by DOE in April 2002.

Interviews

Interviews were solicited with local officials that were considered to be most interested or knowledgeable concerning the site.

Questions from the list below were asked during the interviews; however, each official was not asked all of the questions on the list. Only questions pertinent to the function of the office were asked of individual officials. The list of questions used in interviews is as follows:

- What is your impression of the project? (general sentiment)
- Do you have any specific problems complying with the terms of the cooperative agreement?
- Are there any plans to change the recreational use of the former millsite? If so, have these plans been submitted to the National Park Service?
- Are you aware of any projects or activities that could disturb the wetland areas along Montezuma Creek?

- Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.
- What effect have site operations had on the surrounding community?
- Is there a continuous onsite LTSM presence? If so, please describe staff and activities.
- Do you feel well informed about the site's activities and progress?
- Have there been communications or activities (site visits, inspections, reporting activities, etc.) conducted by the City of Monticello regarding the millsite? If so, please give purpose and results.
- Have there been any complaints, violations, or other incidents related to the site requiring a response by the City of Monticello? If so, please give details of the events and results of the responses.
- What are the fire department's responsibilities regarding the millsite and have you responded to any fires or situations as the site?
- During your travels in the vicinity of the millsite, have you ever noticed any unusual activities?
- Do you have any concerns regarding possible mill tailings contamination in UDOT rights-of-way on Highways 191 and 666?

The following individuals were specifically contacted for interviews concerning the MMTS and MVP:

Mr. Trent Schaeffer – Monticello City Manager
Mr. Dale Black – Monticello Mayor (during remedial activities)
Mr. Scott Pehrson – Monticello Mayor Elect
Mr. Kent Adair – Monticello Chief of Police
Mr. Terrill Slade – Monticello Fire Chief
Mr. Rick Bailey – San Juan County Administrator
Mr. Ty Lewis – San Juan County Commission Chairman
Mr. Doug Pehrson – San Juan County Road Supervisor
Mr. Daryl Friant – Utah Department of Transportation Environmental Engineer

Mr. Lewis was unavailable and did not reschedule an interview at another time. Each of the other officials participated in an interview. Mr. Black's tenure as mayor expired before he was contacted for an interview. Questions concerning potential problems or benefits associated with the Monticello projects were asked. Each individual was also asked if there were any complaints or if they were asked to respond to the MVP in any official capacity. All interviewees reported that they had no concerns and that they were rarely, if ever, required to respond to complaints about the project. Results of the interviews are provided in Attachment 3.

Notification of this CERCLA five-year review and the opportunity for public comment was provided in the local media. Interviews with business entities, adjacent property owners, and other interested persons were only solicited through this notice. No comments, concerns, or

requests for information were received by DOE; therefore, no interviews with the general public were conducted.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

The review of documents and the results of the site inspection indicate that the remedy is functioning as intended in the *Monticello Vicinity Properties Project Declaration for the Record of Decision and Record of Decision Summary*.

The remedy for all operable units has been completed. The remedy included removal of tailings, ore, and process-related material from included properties to the interim repository located at the former millsite location along Montezuma Creek and final placement in an on-site repository. Affected properties were reconstructed following removal actions. As allowed under 40 CFR 192.21 and 192.22, supplemental standards were approved for certain properties allowing some of the low-level radioactively contaminated soil to remain in place. Radiation exposure to the public has been reduced at the supplemental standards properties through implementation of institutional controls that restrict access and control the use of the land to prevent unacceptable future exposure. EPA and UDEQ signified the successful implementation of the remedy through approval of Remedial Action Reports (Table 1).

LTSM activities have been initiated that ensure enforcement of institutional controls and result in identification and removal of contaminated material from excavations conducted in supplemental standards areas. Routine inspections of supplemental standards properties are also conducted under the LTSM Program.

The institutional controls for one privately owned property have been implemented but not formalized through a zoning change. The City of Monticello has agreed to re-zone this property, but it has not yet completed the task. DOE is monitoring the re-zoning progress and is continuing to work with the City to ensure the task is completed. Although this portion of the selected remedy is not functioning as intended, the site is protective as a result of DOE LTSM activities.

Question B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy still valid?

There have been no changes in the physical conditions at the site or in the use of the site that would reduce the protectiveness of the remedy or render the initial risk analyses invalid. The exposure assumptions, identified in the *Monticello Vicinity Properties, Equivalency Documentation*, toxicity data and cleanup levels have not changed since the ROD was signed. However, recent toxicological studies suggest that a lower, more conservative reference dose (RfD) for uranium ingestion is justified (*Federal Register*, December 7, 2000). Based on these studies, EPA calculates that a RfD of 0.6 µg/kg/day is appropriate—a value 1/5 of that currently provided in EPA's *Integrated Risk Information System* (IRIS). Based on the current uranium RfD in IRIS, EPA Region III has calculated a soil screening level for residential use of 230 mg/Kg to be protective. If the RfD of 0.6 mg/kg/day is more appropriate, then a soil screening level of 46 mg/Kg would be considered protective for residential use. All of the soils at the site have been

remediated to well below this level and would be protective even if, in the future, the lower RfD for uranium is formally adopted and revised in IRIS.

The RAO to eliminate the potential for exposure of the local population to elevated levels of radon gas and gamma radiation has been accomplished through source removal and implementation of institutional controls.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No anomalous conditions were found during the site inspection. The five-year review of LTSM documents did not indicate that the protectiveness of the remedy is compromised. Evidence of appropriate implementation of LTSM activities was apparent during the site inspection. LTSM monitoring and radiological surveying have not identified contamination inconsistent with what is known or expected. There is no other information that calls into question the protectiveness of the remedy.

Although federal regulations have been promulgated that lower the drinking water standard for arsenic and finalize the standard for uranium, these regulations do not affect the remedy for MVP.

Technical Assessment Summary

The remedy for MVP is functioning as intended by the ROD. There have been no changes in the physical conditions or the use of the supplemental standards areas that would adversely affect the protectiveness of the remedy. Applicable or relevant and appropriate requirements cited in the ROD have been met. There have been no changes in the toxicity factors for the contaminants of concern that were used in the baseline risk assessment, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy.

VIII. Issues

Table 2 lists only the observations considered to have potential effect on future protectiveness of the remedy. All of the observations noted in the inspection are provided in Attachment 4.

Table 2 – Issues

Issue	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Privately owned property (MS–00176–VL) at which supplemental standards have been applied has not been rezoned to prevent construction of a habitable structure.	N	Y
Erosion is occurring along the west side of the Highway 191 embankment.	N	Y

IX. Recommendations and Follow-up Actions

Table 3 – Recommendations and Follow-up Actions

Issue	Recommendations/ Follow-up Actions	Party Responsible	Oversight Agency	Affects Protectiveness Current	Affects Protectiveness Future
Privately owned supplemental standards property has not been rezoned	The property should be rezoned or other actions formalizing the institutional controls should be implemented.	DOE	EPA/UDEQ	N	Y
Erosion is occurring along the Highway 191 embankment.	Continue monitoring for erosion. Implement contingency actions identified in LTSM operating procedures if the erosion threatens the contamination left in place.	DOE	EPA/UDEQ	N	Y

X. Protectiveness Statements

Protectiveness statements for the individual OUs of the MVP site are presented below:

Operable Unit A – Properties included in the FFA

The remedy at OU A is protective of human health and the environment. Contamination has been removed from OU A and the exposure pathways have been eliminated.

OU A construction was completed in accordance with the requirements of the ROD and documented in the Draft Final Remedial Action Report on November 8,1996. No new information has been identified since that time that would call the protectiveness of the remedy into question.

Operable Unit B – Properties included subsequent to the FFA

The remedy at OU B is protective of human health and the environment. Contamination has been removed from OU B and the exposure pathways have been eliminated.

OU B construction was completed in accordance with the requirements of the ROD and documented in the Draft Final Remedial Action Report on July 14,1999. No new information has been identified since that time that would call the protectiveness of the remedy into question.

Operable Unit C – Disputed properties

The remedy at OU C is protective of human health and the environment. Contamination has been removed from OU C and the exposure pathways have been eliminated.

OU C construction was completed in accordance with the requirements of the ROD and documented in the Draft Final Remedial Action Report on October 15, 1997. No new information has been identified since that time that would call the protectiveness of the remedy into question.

Operable Unit D – Properties contaminated with potential hazardous substances

The remedy at OU D is protective of human health and the environment. Contamination has been removed from OU D and the exposure pathways have been eliminated.

OU D construction was completed in accordance with the requirements of the ROD and documented in the Draft Final Remedial Action Report on March 18,1998. No new information has been identified since that time that would call the protectiveness of the remedy into question.

Operable Unit E – Properties crossed by Hall's Ditch

The remedy at OU E is protective of human health and the environment. Contamination has been removed from OU E and the exposure pathways have been eliminated.

OU E construction was completed in accordance with the requirements of the ROD and documented in the Draft Final Remedial Action Report on March 18, 1998. No new information has been identified since that time that would call the protectiveness of the remedy into question.

Operable Unit F – Properties where owner negotiations delayed remediation

The remedy at OU F is protective of human health and the environment. Contamination has been removed from OU F and the exposure pathways have been eliminated.

OU F construction was completed in accordance with the requirements of the ROD and documented in the Draft Final Remedial Action Report on December 24, 1997. No new information has been identified since that time that would call the protectiveness of the remedy into question.

Operable Unit G – Properties included since the beginning of 1995

The remedy at OU G is protective of human health and the environment. Contamination has been removed from OU G and the exposure pathways have been eliminated.

OU G construction was completed in accordance with the requirements of the ROD and documented in the Draft Final Remedial Action Report on July 14, 1999. No new information has been identified since that time that would call the protectiveness of the remedy into question.

Operable Unit H – Supplemental Standards properties

The remedy at OU H (supplemental standards properties including Monticello city streets and utilities, Highways 191 and 666 rights-of-way, and MS–00176–VL) currently protects human health and the environment because supplemental standards have been applied and the property owners have verbally agreed to not build structures in or remove soils from areas in which contamination has been left in place. However, in order for the remedy to be protective in the long-term, the following actions need to be taken to ensure

long-term protectiveness: institutional controls must be formalized for property MS–00176–VL by re-zoning to require a special building permit that would prohibit construction of a habitable structure in areas where contamination has been left in place; or, formalize institutional controls by placing a restrictive easement on the property deed that will prohibit construction of a habitable structure in and removal of soils from contaminated areas.

OU H construction was completed in accordance with the requirements of the ROD and documented in the Draft Final Remedial Action Report on April 29, 1999. Supplemental standards, as allowed under 40 CFR 192. 21 and 192.22, were applied to these properties and contaminated material was left in place. Institutional controls were established to limit access and reduce exposure to the remaining contamination. Since the time of completion, institutional controls have been formalized and a cooperative agreement with the City of Monticello. On-site LTSM staff ensures the remedy remains protective of human health and the environment by monitoring adherence to the institutional controls and conducting routine property inspections.

The cooperative agreement that formalized the institutional controls do not apply to the privately owned property in OU H, which is identified as MS–00176–VL. A special zoning district was proposed for this property to formalize the institutional controls, but the City of Monticello has not yet approved of the zoning district. DOE is continuing to work with the City to create the special zoning district. The special zoning district is anticipated to be finalized in the summer of 2002. LTSM inspections have verified that the proposed institutional controls are being met. The remedy currently is protective, but the long-term protectiveness is inadequate because the institutional controls are not enforceable.

No other new information has been identified since that time that would call the protectiveness of the remedy for OU H into question.

Comprehensive protectiveness statement covering all remedies at the MVP.

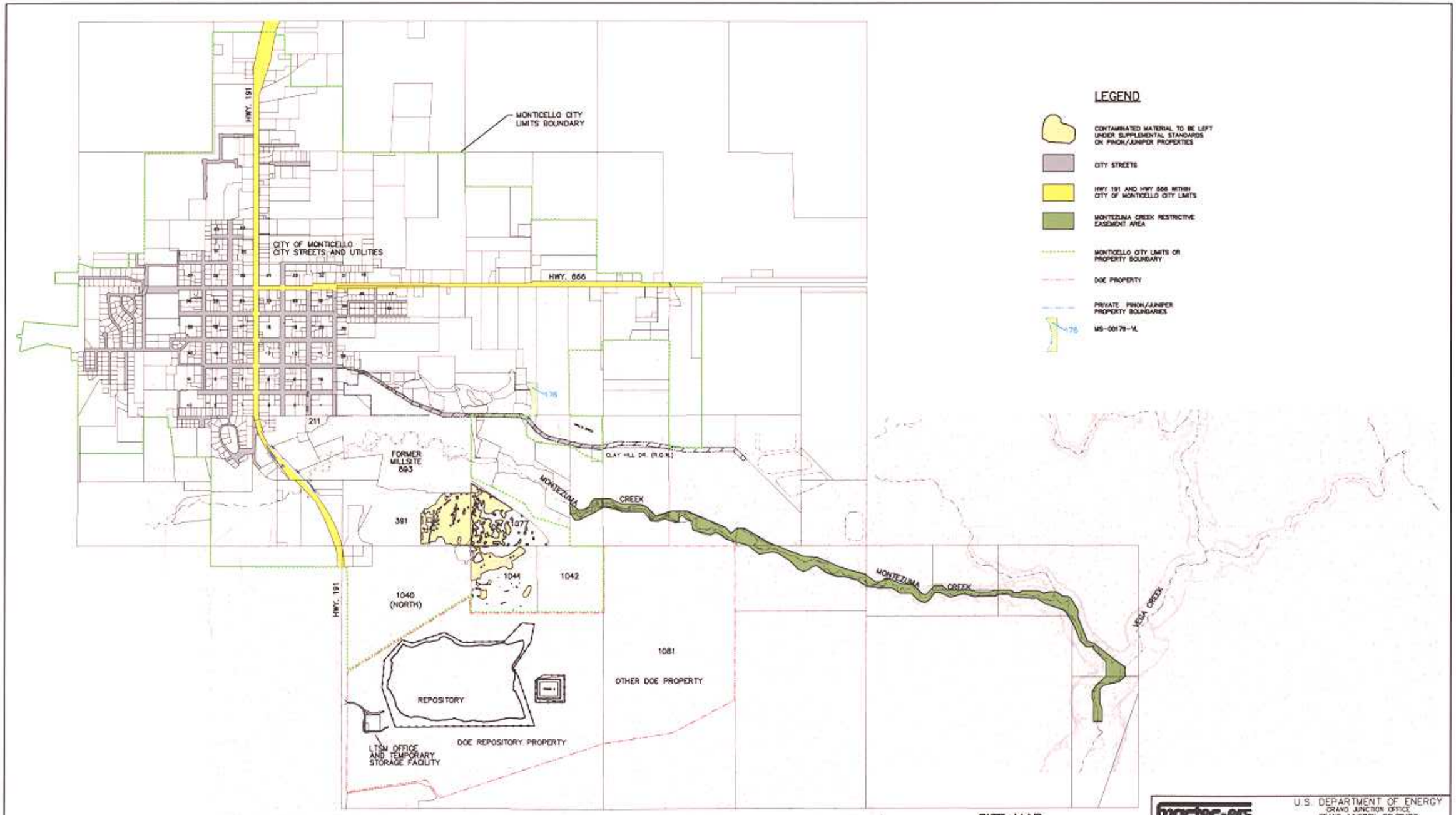
The remedial actions at OU A through OU G are protective. However, because the remedial action at OU H is protective only in the short-term, the site is protective of health and the environment in the short-term. The remedial action at OU H is protective in the short-term; however, a pending zoning change for Property MS–00176–VL needs to be completed for the remedy to be protective in the long-term. The zoning change will disallow construction of buildings in the areas where contamination was left in place. The following actions need to be taken to ensure protectiveness; property MS–00176–VL must be re-zoned to prohibit construction of a habitable structure and removal of soils in areas where contamination has been left in place; or, a restrictive easement must be placed on the property deed that will prohibit construction of a habitable structure and removal of soils in these areas.

XI. Next Review

The next five-year review for the MMTS is required in June 2007, 5 years from this review.

Attachment 1

Site Map



mactec-ers	U.S. DEPARTMENT OF ENERGY GRAND JUNCTION OFFICE GRAND JUNCTION, COLORADO
MONTICELLO RADIOACTIVELY CONTAMINATED PROPERTIES SITE MAP	
DATE PREPARED: JUNE 6, 2002	FILENAME: S0077900

Attachment 2

CERCLA Five-Year Review Announcement

The U.S. Department of Energy Grand Junction Office has initiated a Five-Year Review for the Monticello Mill Tailings (U.S. DOE) Site and the Monticello Radioactively Contaminated Properties (Monticello Vicinity Properties) Site

Representatives from the U.S. Department of Energy (DOE), Grand Junction Office (GJO) are taking the lead in conducting the Five-Year Reviews required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for the Monticello Mill Tailings (U.S. DOE) Site and the Monticello Radioactively Contaminated Properties (Monticello Vicinity Properties) Site. These reviews serve as a checkup to ensure that the selected cleanup strategy continues to protect human health and the environment. This will be the second such review performed for the Monticello Mill Tailings Site and the Monticello Radioactively Contaminated Properties (Monticello Vicinity Properties) Site since the start of remediation in 1987, The remediation included removing and relocating approximately 2.5 million cubic yards of uranium mill tailings and contaminated material from the millsite, adjacent properties, and vicinity properties to a repository constructed south of Monticello, Utah. Land use restrictions in conjunction with supplemental standards are in place to ensure that any contamination left in place is not dispersed and does not adversely affect human health or the environment. Information on these two sites is available on the DOE-GJO Website located at www.gjo.doe.gov/monticello/index.htm

The review team is studying information about the sites, conducting interviews with selected city, county, and State officials, and writing a report detailing the results of the review. The public is encouraged to contact the DOE-GJO representative indicated below with suggestions on areas of concern to be included in this review.

Art Kleinrath
U.S. Department of Energy
Grand Junction Office
2597 B 3/4 Road
Grand Junction, CO 81503
970-248-6037
1-800-269-7145

A draft report of this Five-Year Review is expected to be available for comment in early May. Upon completion the finalized document will be available for public review at the following addresses:

Monticello Repository Office Complex
7031 South Highway 191
Monticello, UT 84535
435-587-4000

U.S. Department of Energy
Grand Junction Office
Technical Library
Grand Junction, CO 81503
970-248-6085

THE U.S. DEPARTMENT OF ENERGY GRAND JUNCTION OFFICE HAS INITIATED A FIVE-YEAR REVIEW FOR THE MONTICELLO MILL TAILINGS (U.S. DOE) SITE AND THE MONTICELLO RADIOACTIVITY CONTAMINATED PROPERTIES (MONTICELLO VICINITY PROPERTIES) SITE

Representatives from the U.S. Department of Energy (DOE), Grand Junction Office (GJO) are taking the lead in conducting the Five-Year Reviews required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for the Monticello Mill Tailings (U.S. DOE) Site and the Monticello Radioactivity Contaminated Properties (Monticello Vicinity Properties) Site. These reviews serve as a checkup to ensure that the selected cleanup strategy continues to protect human health and the environment. This will be the second such review performed for the Monticello Mill Tailings Site and Monticello Radioactivity Contaminated Properties (Monticello Vicinity Properties) Site since the start of remediation in 1987. The remediation included removing and relocating approximately 2.5 million cubic yards of uranium mill tailings and contaminated material from the millsite, adjacent properties, and vicinity properties to a repository constructed south of Monticello, Utah. Land use restrictions in conjunction with supplemental standards are in place to ensure that any contamination left in place is not dispersed and does not adversely affect human health or the environment. Information on these two sites is available on the DOE-GJO Website located at www.gjo.doe.gov/monticello/index.htm.

The review team is studying information about the sites, conducting interviews with selected city, county, and State officials, and writing a report detailing the results of the review. The public is encouraged to contact the DOE-GJO representative indicated below with suggestions on areas of concern to be included in the review.

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Grand Junction, CO 81503
970-248-6085

The U.S. Department of Energy Grand Junction Office Solicits Comments on the Five-Year Review Documents for the Monticello Mill Tailings (U.S. DOE) Site and the Monticello Radioactively Contaminated Properties (Monticello Vicinity Properties) Site

Representatives from the U.S. Department of Energy (DOE), Grand Junction Office (GJO) are taking the lead in conducting the Five-Year Reviews required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for the Monticello Mill Tailings (U.S. DOE) Site and the Monticello Radioactively Contaminated Properties (Monticello Vicinity Properties) Site. These reviews, of which this is the second, serve as a checkup to ensure that the selected cleanup strategy continues to protect human health and the environment. We invite the public to comment on the effectiveness of the cleanup in meeting the protection goal. The remediation included removing and relocating approximately 2.5 million cubic yards of contaminated material and the implementation of use restrictions on certain lands. Information on these two sites is available on the DOE-GJO Website located at www.gjo.doe.gov/monticello/index.htm.

The draft Five-Year Review reports are available for public comment. Interested parties may review the draft reports at the Monticello Repository Office Complex located at 7031 South Highway 191, Monticello, UT 84535. Comments on the reports may be submitted to:

U.S. Department of Energy Grand Junction Office
Attn: Art Kleinrath
2597 B 3/4 Road
Grand Junction, CO 81503

Mr. Kleinrath may also be contacted via phone by calling 1-800-399-5618 or 970-248-6037. The official comment period begins May 1, 2002 and ends May 31, 2002.

Upon completion the finalized document will be submitted to U.S. EPA for acceptance. The final document will be available at the following locations:

Monticello Repository Office Complex
7031 South Highway 191
Monticello, UT 84535
435-587-4000

U.S. Department of Energy
Grand Junction Office
Technical Library
Grand Junction, CO 81503
970-248-6085

THE U.S. DEPARTMENT OF ENERGY GRAND JUNCTION OFFICE SOLICITS COMMENTS ON THE FIVE-YEAR REVIEW DOCUMENTS FOR THE MONTICELLO MILL TAILINGS (U.S. DOE) SITE AND THE MONTICELLO RADIOACTIVITY CONTAMINATED PROPERTIES (MONTICELLO VICINITY PROPERTIES) SITE

Representatives from the U.S. Department of Energy (DOE), Grand Junction Office (GJO) are taking the lead in conducting the Five-Year Reviews required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for the Monticello Mill Tailings (U.S. DOE) Site and the Monticello Radioactivity Contaminated Properties (Monticello Vicinity Properties) Site. These reviews, of which this is the second, serve as a checkup to ensure that the selected cleanup strategy continues to protect human health and the environment. We invite the public to comment on the effectiveness of the cleanup in meeting the protection goal. The remediation included removing and relocating approximately 2.5 million cubic yards of contaminated material and the implementation of use restrictions on certain lands. Information on these two sites is available on the DOE-GJO Website located at www.gjo.doe.gov/monticello/index.htm.

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Attachment 3

Interviews

Interviews for 5 Year CERCLA Review

One of the requirements of the 5 Year CERCLA Review is the by Mr. Gary Karriker (DOE contractor public relations specialist) over a two-day period on February 26 and 27, 2002. Those individuals interviewed were Trent Schafer, Monticello City Manager; Terrill Slade, Monticello Fire Chief; Kent Adair, Monticello Police Chief; Doug Pehrson, San Juan County Road Superintendent; Rick Bailey, San Juan County Administrator; and Daryl Friant, UDOT Environmental Engineer. Those not available for an interview at this time were Scott Pehrson, Monticello Mayor Elect and Ty Lewis, San Juan County Commissioner. The information gathered during these interviews is as follows:

Trent Schafer – Monticello City Manager

Question: What is your general impression of the project?

Response: Mr. Schafer was very satisfied with the project from all aspects. DOE, EPA, and MACTEC-ERS personnel were very pleasant to work with and always very informative. He felt it was very important to remove mill tailings contamination from the vicinity properties and the millsite to reduce the exposure risk to the citizens of Monticello. He also felt the project had a very positive financial impact on the whole community.

Question: Are there any problems the City has in complying with the terms of the Cooperative Agreement?

Response: The terms of the Cooperative Agreement are very clear and easy to comply with. The LTSM staff is very helpful and the equipment DOE provided ensures the City has the means to comply with the Agreement.

Question: Are there any plans by the City to change the recreational use of the millsite?

Response: There are currently no changes planned in the original use plan submitted to the National Park Service.

Question: Do you know of or have any plans that could disturb the wetland areas along Montezuma Creek?

Response: I am not aware of any plans that would affect the wetland areas.

Question: Are you aware of any community concerns regarding the site before, during, or after remediation/reclamation?

Response: Nothing other than minor dust control problems during remediation.

Question: What effect have site operations had on the community?

Response: Project had no adverse effects it did, however, provide a huge economic stimulus to the City and surrounding communities. Monticello has experienced an economic downturn since the project ended.

Question: Is there a continuous onsite LTSM presence?

Response: Yes, Joe Slade is great to work with. He checks in with the City on a daily basis to ensure he has coverage for our planned current and future activities. The MACTEC–ERS Public Relations person also checks with me weekly to make sure we don't have any problems. These two people will always ensure that both their operations and ours work in harmony with one another.

Question: Do you feel well informed about the site's activities and progress?

Response: Yes, both the DOE Project Manager (J. Berwick) and the MACTEC–ERS Public Relations Person (G. Karriker) kept me well informed on all activities. Without these two people, the project would still be going on. The LTSM person (J. Slade), as I mentioned is great to work with.

Question: Have there been communications or activities conducted by the City regarding the millsite?

Response: The City has had communications with both DOE and EPA regarding millsite reclamation and conducted a tour with both agencies to address their concerns after millsite reclamation was complete.

Question: Have there been any complaints, violations or other incidents related to the site requiring a response by the City?

Response: Other than the fact that I had to talk to Kedrick Somerville about his access to the irrigation structure on the site. There haven't been any incidents or complaints.

Terrill Slade – Monticello Fire Chief

Question: What are the fire department's responsibilities regarding the millsite and have you responded to any fires or situations at the site?

Response: The fire department is responsible for fire control and emergency response at the millsite. To date there have been no situations or activities that required the attention of the fire department. There was one burn permit issued to Joe Slade to burn weeds at the repository.

Kent Adair – Chief of Police

Question: Has there ever been a complaint, violation or incident on the millsite that required a response by the Monticello Police Department?

Response: Other than the noise complaint by Tracy Hawkins during millsite remediation the Police Department has never been called to the millsite or noticed any unusual activities.

Doug Pehrson – City Road Supervisor

Question: During your travels in the vicinity of the millsite, have you ever noticed any unusual activities?

Response: Other than DOE/MACTEC–ERS activities I haven't ever seen anyone on the millsite, day or night.

Rick Bailey – County Administrator

Question: What responsibilities, if any, does the County have concerning fire control and emergency response at the former millsite?

Response: The City Fire Department is responsible for the millsite. The only time the County would respond is if the City needed and requested assistance.

Question: What is your overall opinion of the site and its operations during and after remediation/reclamation?

Response: Because the site is situated partially with in the Monticello City limits and DOE was communicating with the City on MVP properties, the County didn't get very involved with the project. My impression of the project was positive concerning the actions of the DOE and MACTEC–ERS.

Daryl Friant – UDOT Environmental Engineer

Question: Do you have any concerns regarding possible mill tailings contamination in UDOT rights-of-way on Highways 191 and 666?

Response: UDOT has a planned project this coming summer to rebuild Highway 666 from Monticello to the Colorado State line. There is concern about possible mill tailings contamination in the UDOT rights-of-way. Mr. Friant asked if there was a program to cover his concern. He was told of DOE's LTSM Program and that it may cover any contamination removal to the City limits.

Dale Black – Former Monticello City Mayor

Mr. Black who was Mayor of Monticello during the period of active remediation was interviewed on April 17,2001.

Question: What is your impression of the Project?

Response: Mr. Black's general impression of the project was good, from both a health perspective and an economic perspective.

Question: Do you have any specific problems complying with the terms of the Cooperative Agreement?

Response: The City of Monticello did not have any problems complying with the Cooperative Agreement.

Question: Are there any plans to change the recreational use of the former millsite? If so, have these plans been submitted to the National Park Service? Are you aware of any projects or activities that could disturb the wetland areas along Montezuma Creek?

Response: Before Mr. Black left as mayor, the City did not have any plans to change the recreational use of the former millsite, nor was he aware of any activities that would disturb the wetlands.

Question: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Response: While he was mayor no complaints or concerns regarding the site or its operation were brought to his attention.

Question: What effect have site operations had on the surrounding community?

Response: The work and related activities that were performed on the millsite were of great economic value to Monticello and surrounding communities.

Question: Is there a continuous onsite LTSM presence? If so, please describe staff and activities.

Response: Mr. Black is aware of an LTSM presence through Joe Slade's activities and overall presence both at City Offices and in the field.

Question: Do you feel well informed about the site's activities and progress?

Response: Mr. Black felt he was always well informed of DOE activities and progress both through the DOE Project Manager and the MACTEC–ERS Owner Relations Representative.

Question: Have there been communications or activities (site visits, inspections, reporting activities, etc.) conducted by the City of Monticello regarding the millsite? If so, please give purpose and results.

Response: While the City was reclaiming the millsite they conducted numerous site visits to check the progress of the contractor and stayed in constant communication with DOE through Irwin Stewart and Gary Karriker.

Question: Have there been any complaints, violations, or other incidents related to the site requiring a response by the City of Monticello? If so, please give details of the events and results of the responses.

Response: There have been no complaints of incidents involved with the millsite requiring a response from the City.

Question: During your travels in the vicinity of the millsite, have you ever noticed any unusual activities?

Response: None.

Question: Do you have any concerns regarding possible mill tailings contamination in UDOT rights-of-way on Highways 191 and 666?

Response: Mr. Black has no concerns regarding contamination in UDOT rights-of-way on Highways 191 and 666.

Scott Pehrson – Monticello Mayor

Question: What is your impression of the project? (general sentiment)

Response: The project was good for the community, provided a lot of jobs, and was great for the local economy.

Question: Do you have any specific problems complying with the terms of the cooperative agreement?

Response: Mr. Pehrson stated that he was not familiar with the Cooperative Agreement yet.

Question: Are there any plans to change the recreational use of the former millsite? If so, have these plans been submitted to the National Park Service?

Response: There are no plans to change from recreational use on the millsite.

Question: Are you aware of any projects or activities that could disturb the wetland areas along Montezuma Creek?

Response: There are no planned projects or activities that would disturb the wetlands.

Question: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Response: Mr. Pehrson stated that he was not aware of any community concerns regarding the site or the operation of the site.

Question: What effect have site operations had on the surrounding community?

Response: The project had great economic value for the community.

Question: Is there a continuous onsite LTSM presence? If so, please describe staff and activities.

Response: The LTSM presence is outstanding through the activities of Joe Slade.

Question: Do you feel well informed about the site's activities and progress?

Response: Mr. Pehrson stated that he did not live in Monticello during the majority of the remedial activities and that he did not pay much attention to it when he did live in Monticello.

Question: Have there been communications or activities (site visits, inspections, reporting activities, etc.) conducted by the City of Monticello regarding the millsite? If so, please give purpose and results.

Response: Mr. Pehrson stated that he has not been involved with any millsite activities since being elected as mayor.

Question: Have there been any complaints, violations, or other incidents related to the site requiring a response by the City of Monticello? If so, please give details of the events and results of the responses.

Response: Mr. Pehrson is not aware of any complaints or violations regarding response by the City.

Question: What are the fire department's responsibilities regarding the millsite and have you responded to any fires or situations as the site?

Response: The county is responsible for first response with backup by the City Fire Department.

Question: During your travels in the vicinity of the millsite, have you ever noticed any unusual activities?

Response: No unusual activities at the millsite have been noticed.

Question: Do you have any concerns regarding possible mill tailings contamination in UDOT rights-of-way on Highways 191 and 666?

Response: Mr. Pehrson has no concerns with contamination in UDOT right-of-way on Highways 166 and 191. He is confident that the LTSM program will handle any new contamination appropriately.

Attachment 4

2002 Annual Inspection Observations

2002 Annual Inspection Observations

Issue	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Repository		
Privately owned property (MS–00176–VL) at which supplemental standards have been applied has not been rezoned to prevent construction of a habitable structure.	N	Y
Erosion is occurring along the west side of the Highway 191 embankment.	N	Y
Property record books were incomplete and inadequate.	N	N
The Administrative Record and Repository documentation was incomplete.	N	N